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REMARKS / ARGUMENTS

Status of Claims

Claims 1-21 are pending in the application and stand rejected. Applicant has amended Claims 1, 9 and 17, canceled Claim 8, and added new Claim 22, leaving Claims 1-7 and 9-22 for consideration upon entry of the present Amendment.

Applicant respectfully submits that the rejections under 35 U.S.C. §102(b) and 35 U.S.C. §103(a) have been traversed, that no new matter has been entered, and that the application is in condition for allowance.

Rejections Under 35 U.S.C. §102

Claims 1, 6-9 and 14-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Edelstein et al. (U.S. Patent No. 4,840,700, hereinafter Edelstein).

Applicant traverses this rejection for the following reasons.

Applicant respectfully submits that "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." Verdegaal Bros. V. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987) (emphasis added). Moreover, "[t]he identical invention must be shown in as complete detail as is contained in the *** claim." Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). Furthermore, the single source must disclose all of the claimed elements "arranged as in the claim." Structural Rubber Prods. Co. v. Park Rubber Co., 749 F.2d 707, 716, 223 U.S.P.Q. 1264, 1271 (Fed. Cir. 1984). Missing elements may not be supplied by the knowledge of one skilled in the art or the disclosure of another reference. Titanium Metals Corp. v. Banner, 778 F.2d 775, 780, 227 U.S.P.Q. 773, 777 (Fed. Cir. 1985).

Applicant has amended Claim 1 to recite, inter alia,

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"...wherein the bonding surface has been subjected to a surface treatment to improve the mechanical bonding properties of the bonding surface to the nonconducting tubular substrate; and

wherein a bonding resin is disposed between the treated bonding surface and the nonconducting tubular substrate, the combination of the treated bonding surface and the bonding resin in the coil assembly having an improved bond strength as compared to a coil assembly being absent the treated bonding surface."

Claims 9 and 17 have been amended to include similar limitations.

Support for the claim amendments may be found in the specification as originally filed at Paragraphs [0017-0020] and [0026-0027]. No new matter has been added.

Dependent claims inherit all of the limitations of the respective parent.

In comparing Edelstein with the instant invention, Applicant submits that Edelstein does not disclose each and every element of the claimed invention arranged as claimed, and therefore cannot be anticipatory.

Furthermore, the Examiner alleges that Edelstein discloses "wherein the bonding surface of said conductor has been subjected to a surface treatment to improve the mechanical bonding properties of the bonding surface (column 14, lines 39-50, the resin application treats the surface of the conductor for improving bonding properties of its surface)." Paper 20050219, page 2.

In respectful disagreement with the Examiner, Applicant finds Edelstein to disclose "A thin line is then etched in a conducting sheet along a streamline... The current then follows the streamlines... and thus closely approximates the desired current distribution. (Col. 13 line 65 through Col. 14 line 3). A current streamline pattern was placed onto a plastic sheet... Then negative images were produced where a clear, thin line followed the current streamlines... The clear line represented the region to be etched. Using photoresist the negative pattern was transferred to a copper sheet... and then etched from one side... The copper sheet was bonded to a thin plastic backing sheet to prevent relative motion of the parts once the etching was finished... The etched sheets thus produced were bonded to a fiberglass coil form using a polyester resin and secured with

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further layers of fiberglass... The thin lines that were etched correspond to the patterns... which may be interpreted herein as either positive or negative... winding patterns. (Col. 14 lines 23-54)."

Here, Applicant finds Edelstein to be disclosing an etching process to produce current paths, and not an etching (surface treatment) process to work in conjunction with the polyester resin for improving the bonding properties of the copper sheet to the fiberglass coil form. In fact, Edelstein discloses the bonding of the copper sheet to the fiberglass coil form that involves polyester resin and further layers of fiberglass, which appears to be absent a surface treatment of the copper sheet bonding surface for the purpose of improving bonding strength.

In contradiction with the Examiner's allegations, Applicant does not find Edelstein to disclose "wherein the bonding surface has been subjected to a surface treatment to improve the mechanical bonding properties of the bonding surface to the nonconducting tubular substrate", as claimed in the instant application.

Absent anticipatory disclosure in Edelstein of each and every element arranged as claimed, Edelstein cannot be anticipatory.

In view of the amendment and foregoing remarks, Applicant submits that Edelstein does not disclose each and every element of the claimed invention arranged as claimed and therefore cannot be anticipatory. Accordingly, Applicant respectfully submits that the Examiner's rejection under 35 U.S.C. §102(b) has been traversed, and requests that the Examiner reconsider and withdraw of this rejection.

Rejections Under 35 U.S.C. §103(a)

Claim 9 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Edelstein as applied to claim 1, 9 and 17 above, and further in view of Crooks (U.S. Patent No. 5,442,290, hereinafter Crooks).

Claims 2 and 10 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Edelstein as applied to claim 1, 9 and 17 above, and further in view of Sadey et al. (U.S. Patent No. 6,042,711, hereinafter Sadey).

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Claims 3-5, 11-13,19-21 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Edelstein as applied to claim 1 and 9 above, and further in view of MAGNABOND CO-300 chemelex product sheet dated 9/5/2003 & 11/13/2003.

Applicant traverses these rejections for the following reasons.

Applicant respectfully submits that the obviousness rejection based on the References is improper as the References fail to teach or suggest each and every element of the instant invention. For an obviousness rejection to be proper, the Examiner must meet the burden of establishing a prima facie case of obviousness. *In re Fine*, 5. U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988). The Examiner must meet the burden of establishing that all elements of the invention are taught or suggested in the prior art. MPEP §2143.03.

As previously discussed in reference to the rejections under 35 U.S.C. §102(b), Applicant has amended Claims 1, 9 and 17, to more particularly describe the subject matter regarded as the invention. Dependent claims inherit all of the limitations of the respective parent claim.

Regarding these amendments and the remarks above concerning the significance of the amendments with respect to the rejections under 35 U.S.C. §102(b), Applicant submits that Edelstein fails to teach or suggest each and every element of the claimed invention, and that Crooks, Sadey and MAGNABOND CO-300, fail to cure the deficiencies of Edelstein.

In view of the amendments to the claims, in combination with the discussions earlier regarding the rejections under 35 U.S.C. §102(b), Applicant submits that the References fail to teach or suggest each and every element of the claimed invention and disclose a substantially different invention from the claimed invention, and therefore cannot properly be used to establish a prima facie case of obviousness. Accordingly, Applicant respectfully requests reconsideration and withdrawal of all rejections under 35 U.S.C. §103(a), which Applicant considers to be traversed.

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In light of the forgoing, Applicant respectfully submits that the Examiner's rejections under 35 U.S.C. §102(b) and 35 U.S.C. §103(a) have been traversed, and respectfully requests that the Examiner reconsider and withdraw these rejections.

Regarding New Claim 22

Applicant has added new Claim 22, which is dependent from Claim 1 and includes additional subject matter regarded as the invention. Support for Claim 22 may be found in the specification as originally filed at Paragraphs [0017-0020] and [0026-0027]. No new matter has been added.

In view of the previous discussion relating to Claim 1, Applicant respectfully submits that new Claim 22 is directed to allowable subject and respectfully requests entry and notice of allowance thereof.

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The Commissioner is hereby authorized to charge any additional fees that may be required for this amendment, or credit any overpayment, to 07-0845.

In the event that an extension of time is required, or may be required in addition to that requested in a petition for extension of time, the Commissioner is requested to grant a petition for that extension of time that is required to make this response timely and is hereby authorized to charge any fee for such an extension of time or credit any overpayment for an extension of time to the above-identified Deposit Account.

Respectfully submitted,

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